

CLAIMS

What is claimed is:

- 1 1. A saddle for a pedal-operated machine, which saddle has a seat portion
2 having an upper surface for supporting the buttocks of a user and a mounting
3 arrangement for the seat portion which mounting arrangement permits the
4 seat portion to perform a lateral rocking motion ~~the~~, said lateral rocking
5 motion having an effective axis ~~of~~ about which ~~is~~ the motion is performed,
6 said effective axis being disposed above the upper surface of the seat portion.
- 1 2. A saddle as claimed in claim 1, wherein the effective axis of rocking motion
2 of the seat portion extends substantially horizontally.
- 1 3. A saddle as claimed in claim 1, wherein the mounting arrangement includes
2 a mounting bracket to permit the mounting of the saddle on the machine.
- 1 4. A saddle as claimed in claim 3, wherein the mounting arrangement includes
2 a track of generally of arcuate form and which defines a curved path along
3 which the seat portion will move when in use.
- 1 5. A saddle as claimed in claim 4, wherein the track is of part-circular form,
2 centered on an axis disposed above the upper surface of the seat portion.
- 1 6. A saddle as claimed in claim 4, wherein the track is in the form of a rail
2 mounted on one of the seat portion and the bracket, and the other of the seat
3 portion and the bracket has at least two rollers which run on the rail.
- 1 7. saddle as claimed in claim 6, wherein the rail has an upper surface and said
2 at least two rollers run on the rail upper surface.
- 1 8. A saddle as claimed in claim 7, wherein the rail is of T-shaped section with
2 a flange projecting laterally from a central web and there are at least two
3 further rollers disposed one to each side of the central web of the rail and

4 arranged to run on the undersides of the flange, in opposition to said at least
5 two rollers.

1 9. A saddle as claimed in claim 4, wherein the track defines a channel-shaped
2 groove and there are at least two rollers which run in the groove.

1 10. A saddle as claimed in claim 9, wherein there are two channel-shaped grooves
2 spaced apart in a direction parallel to the axis of rocking movement of the
3 seat portion, and there are rollers which run in both of the grooves.

1 11. A saddle as claimed in claim 4, wherein the bracket is connected to the track
2 and the seat portion is provided with said rollers which run on the track.

1 12. A saddle as claimed in claim 3, wherein the mounting arrangement includes
2 two links each connected at their upper ends to the seat portion and at their
3 lower ends to the mounting bracket, whereby the rocking motion is defined
4 by the combined action of the links.

1 13. A saddle as claimed in claim 12, wherein the links are resiliently deformable
2 and lower ends thereof are clamped to the mounting bracket, whereby the
3 links are resiliently deformed as the saddle performs its rocking motion.

1 14. A saddle as claimed in claim 1, wherein the seat portion is resiliently biased
2 to a central position and moves against that bias when performing a rocking
3 motion.

1 15. A saddle as claimed in claim 1, wherein the radius of curvature of the rocking
2 movement of the seat portion lies in the range of 175 to 250mm.

1 16. A pedal-operated machine having pedals and a saddle, wherein the saddle has
2 a seat portion having an upper surface for supporting the buttocks of a user
3 and a mounting arrangement for the seat portion which mounting

4 arrangement permits the seat portion to perform a lateral rocking motion,
5 said lateral rocking motion having an effective axis about which the motion
6 is performed, said effective axis being disposed above the upper surface of the
7 seat portion.